



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/787,692	10/15/85	NILSEN	

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EXAMINER	
BEMA JR, W	
ART UNIT	PAPER NUMBER
4.12	48
DATE MAILED: 11/07/86	

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 9/8/86 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449                  | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 130-135 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 130-135 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are ☐ acceptable;  
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Art Unit 212

The final rejection is being withdrawn and ex-parte prosecution before the examiner is being resumed in view of the discovery of a reference to Frank et al clearly anticipating some of the claims and rendering other claims obvious over 35USC103. Frank et al was discovered during the search of an unrelated case, and it demonstrates just how unduely broad applicant's claims are. Please add the following rejections to the grounds of rejection already of record.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 130, 134 and 135 are rejected under 35 U.S.C. 102(e) as being anticipated by Franke et al.

Figure 1 of Franke et al. as modified by figure 2 (col. 2, lines 48 et. seq.), anticipates the recitations of the claims. In particular, the load of figure 2 is considered to be transformer 4 having its left hand terminal connected to an AC output terminal at the junction of capacitor 22, and this junction being connected by a wire to an AC input terminal at point I.

Please note also that Franke et al clearly anticipates applicant's basic invention concept as set forth

Art Unit 212

by him during prosecution of the parent application Ser. No. 644,155, in Amendment B, filed July 24, 1985, page 1 bottom two paragraphs.

The text of those sections of Title 35 U. S. Code not included in this action can be found in a prior Office action.

Claims 131 and 132 are rejected under 35 U.S.C. 103 as being unpatentable over Franke et al in view of Gurwicz et al.

The claims differ from Franke et al who uses SCR's 14 and 15 as inverter switches, by calling for switching transistors instead.

Gurwicz et al show a converter using switching transistors in combination with a resonant circuit, as claimed.

One skilled in the converter art knew at the time the invention was made the advantages and limitations of halfbridge inverters using SCR's and transistors as switching elements. He would have known that SCR's are used in high power applications, and that transistors are used in low power applications as in Gurwicz et al., the choice being made in accordance with the requirements of the load. Moreover, he would have known that SCR's are generally more expensive than transistors.

Accordingly, it would have been obvious to use a transistorized inverter for a low power load such as a lamp circuit.

Art Unit 212

Claims 133 is rejected under 35 U.S.C. 103 as being unpatentable over the references as applied to claim 132 above, and further in view of Official Notice or Landis.

The claim further differs from Franke et al by calling for the DC source center tap, which is connected to one of the AC input terminals, to be grounded.

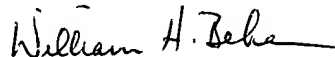
But Official Notice is taken of the fact that one of a pair of ordinary electric utility power lines is commonly grounded in household or commercial use for safety reasons. To so provide one of Franke et al's pair of input lines would have been obvious. Besides, Landis suggests grounding the center tap of a half-bridge inverter. And lastly, ground is where one puts it, witness the positive or negative ground systems in cars, for example. This is the type of design expedient expected of one skilled in the art.

Any inquiry concerning this communication should be directed to William H. Beha at telephone number 703-557-5052.

Beha/dc

703/557/5052

11/4/86



WILLIAM H. BEHA, JR.  
SENIOR EXAMINER  
GROUP ART UNIT 212